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MEMORANDUM

To: Community Water Systems Using a Surface Water Source

From: Barker Hamill, Assistant Director

Water Supply Operations

Subject: New Monitoring Requirements and New Maximum Contaminant Level (MCL) for

Arsenic in Drinking Water

Date: November 4, 2005

This memo addresses the new monitoring requirements and new Maximum Contaminant Level (MCL) for arsenic in drinking water for community water systems using a surface water source. Effective January 23, 2006, the New Jersey Maximum Contaminant Level (MCL) for arsenic will be 5 parts per billion (ppb) which is lower than the USEPA MCL of 10 ppb that will also be effective on that date. Because of the new MCL, Federal and State Regulations will prohibit the use of EPA Method 200.7 and Standard Method 3120B and only allow EPA Method 200.8, EPA Method 200.9, SM 3113B, and SM 3114B to be used for analysis of arsenic in drinking water for compliance determinations. For the purpose of this memo, these four allowable methods (EPA Method 200.8, EPA Method 200.9, SM 3113B, and SM 3114B) will be referred to as the "approved methods."

Because the new arsenic regulations go into effect during the middle of the 2005-2007 compliance period, the requirements for sampling are more complicated than they would be if the regulations went into effect at the beginning of the compliance period. The new regulations require community water systems using surface water source to complete an initial round of sampling for arsenic at <u>all</u> points of entry (both their surface water points of entry and ground water points of entry) using an approved method by December 31, 2006. Note that a public water system that has both surface water points of entry and ground water points of entry is considered a surface water system. The specific requirements are as follows:

Monitoring Requirements for **Surface Water Points of Entry** at a Surface Water System

Surface water points of entry must be sampled annually for arsenic. The sample collected in 2006 must be analyzed using an approved method. If the result of this sample is less than or equal to 5 ppb, no additional arsenic monitoring at the surface water point of entry is required until 2007. If the concentration of the sample taken in 2006 is greater than 5 ppb, the system must begin quarterly monitoring.

Monitoring Requirements for Ground Water Points of Entry at a Surface Water System

The ground water points of entry at community water systems that also use a surface water source are usually only required to be sampled once every three years. The regulations require the sample to be taken in the first year of each three year compliance period (2005, 2008, 2011, etc.). Therefore, in the majority of circumstances, ground water points of entry at surface water systems must be sampled in 2005. We strongly recommend that you use an approved method when conducting your 2005 sampling so the result can be grandfathered.

The sample collected in 2005 from the ground water point of entry can be "grandfathered" if the sample was analyzed by an approved method and the result is less than or equal to 5 ppb. If the result was greater than 5 ppb, the system must collect an additional sample in 2006 using an approved method.

If the sample collected in 2005 was analyzed using EPA method 200.7 or SM 3120B (which will no longer be considered approved methods beginning in 2006), the system is required to collect an additional sample at each ground water point of entry by December 31, 2006, using an approved method.

Note that the Bureau of Safe Drinking Water will review the results from the 2005 sampling event and require that the additional sampling be conducted during the first quarter of 2006 if the result from the 2005 sampling event exceeded 5 ppb. A separate letter will be sent to the water system in this situation.

If samples collected in 2006 exceed the new MCL of 5 ppb, the water system must conduct quarterly monitoring. Compliance for arsenic is measured on a running annual average at each point of entry, unless any one sample would cause the running annual average to exceed the new MCL of 5 ppb. The public water system must bring the water into compliance with the new MCL of 5 ppb within one year of receipt of results that demonstrate an exceedence that constitutes an MCL violation for arsenic.

Please contact Brad Koffler of the Bureau of Safe Drinking Water at 609-292-5550 if you have any questions.

C: Karen Fell, BSDW
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Water Compliance and Enforcement Element